

ALPHA

明泰科技
Alpha Networks Inc.

Investor Conference

2018/3/22

Safe Harbor Statement

Except for the statements in respect of historical matters, the statements contained in this release are “forward-looking statements” subject to risks and uncertainties which may make actual performances and results differ materially from those contained in the forward-looking statements, including the financial stability of international market, demand in end market, supply chain management, impact of competitive products and pricing, exchange rate fluctuations, and other risks beyond the control of the company.



Agenda

- ◆ 4Q17 & 2017 Financial Reviews
- ◆ Growth Drivers
- ◆ Q&A



4Q17 & 2017 Financial Reviews

Consolidated Statements of Comprehensive Income QoQ

NT\$ Millions	4Q 2017		3Q 2017		QoQ	
	Amount	%	Amount	%	Amount	%
Net Revenue	4,362	100.0	4,838	100.0	(476)	(9.8)
Cost of Goods Sold	3,807	87.3	4,074	84.2	(267)	(6.6)
Gross Profit	555	12.7	764	15.8	(209)	(27.4)
Operating Expenses	515	11.8	587	12.1	(72)	(12.3)
Operating Income	40	0.9	177	3.7	(137)	(77.4)
Non-Op. Inc.	35	0.8	30	0.6	5	16.7
Income Before Tax	74	1.7	207	4.3	(133)	(64.3)
Net Income	70	1.6	160	3.3	(90)	(56.3)
EPS (NT\$)	0.16		0.37			

Consolidated Statements of Comprehensive Income YoY

NT\$ Millions	2017		2016		YoY	
	Amount	%	Amount	%	Amount	%
Net Revenue	19,057	100.0	21,831	100.0	(2,774)	(12.7)
Cost of Goods Sold	16,165	84.8	18,647	85.4	(2,482)	(13.3)
Gross Profit	2,892	15.2	3,183	14.6	(291)	(9.1)
Operating Expenses	2,280	12.0	2,534	11.6	(254)	(10.0)
Operating Income	612	3.2	649	3.0	(37)	(5.7)
Non-Op. Inc.	84	0.4	155	0.7	(71)	(45.8)
Income Before Tax	696	3.7	804	3.7	(108)	(13.4)
Net Income	549	2.9	608	2.8	(59)	(9.7)
EPS (NT\$)	1.26		1.40			

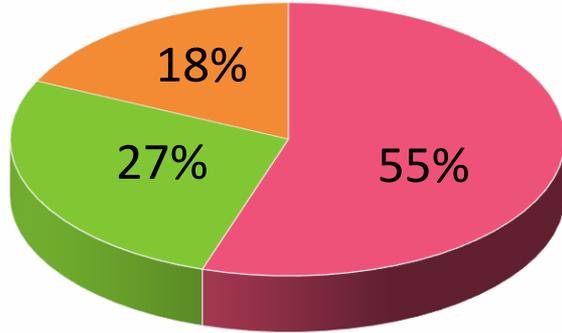
Consolidated Balance Sheets 2017/12/31 vs. 2016/12/31

NT\$ Millions	31-Dec-17		31-Dec-16		YoY	
	Amount	%	Amount	%	Amount	%
Cash and Cash Equivalents	2,662	19.4	1,890	13.3	772	40.8
Accounts Receivable	2,960	21.6	3,649	25.6	(689)	(18.9)
Inventories	3,383	24.6	3,130	21.9	253	8.1
Other Current Assets ^(Note)	2,162	15.8	2,714	19.0	(552)	(20.3)
Non-current Assets	2,558	18.6	2,878	20.2	(320)	(11.1)
Total Assets	13,725	100.0	14,261	100.0	(536)	(3.8)
Current Liabilities	4,638	33.8	5,297	37.1	(659)	(12.4)
Non-current Liabilities	392	2.9	445	3.1	(53)	(11.9)
Total Liabilities	5,030	36.6	5,742	40.3	(712)	(12.4)
Common Stock	4,444	32.4	4,345	30.5	99	2.3
Shareholders' Equity	8,695	63.4	8,519	59.7	176	2.1

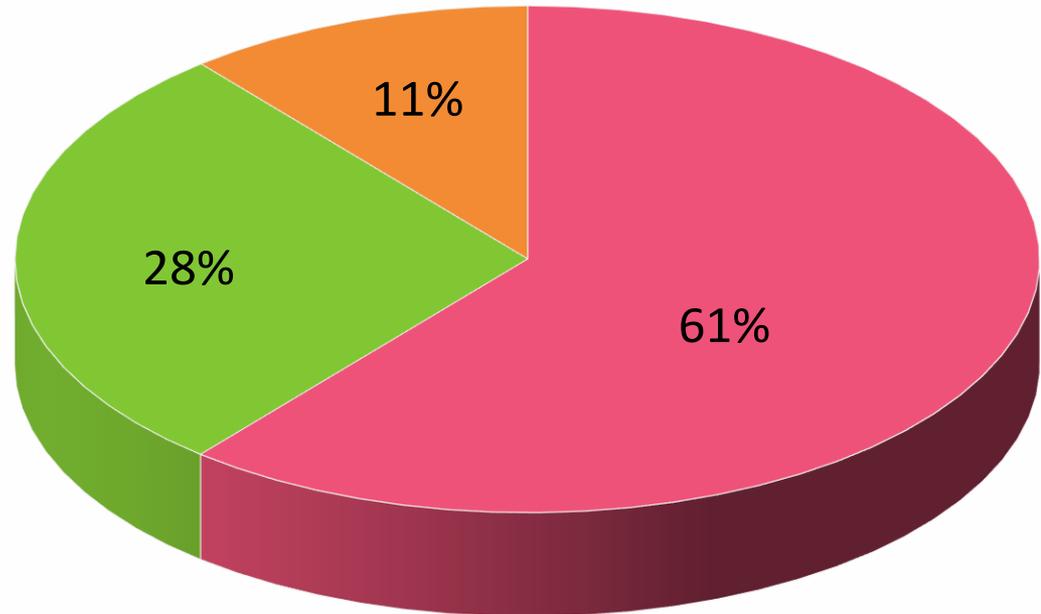
(Note) Other current assets includes deposits with original maturities of more than three months: NT\$1,783M and NT\$2,353M as of Dec. 31, 2017 and 2016.

2017 Revenue Breakdown by Products & YoY Comparison

2016 Revenue by Products



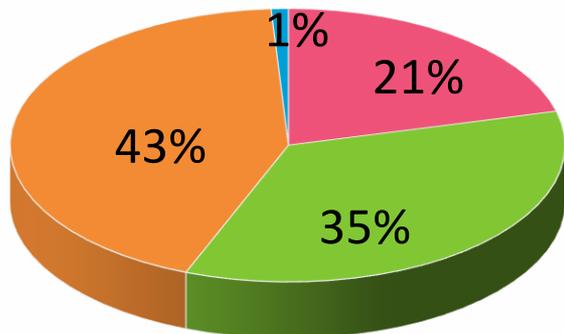
2017 Revenue by Products



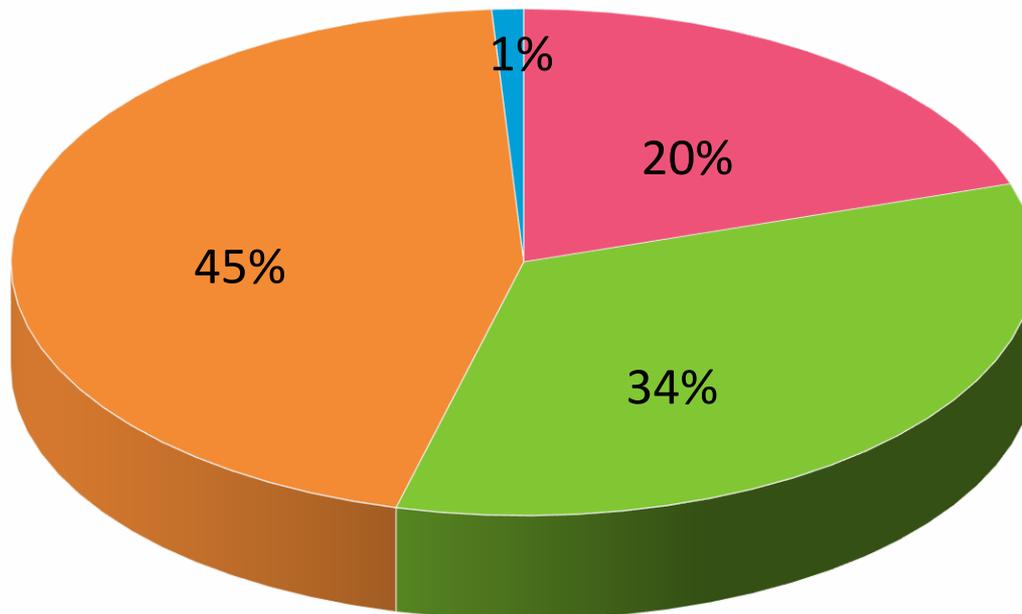
- LAN/MAN
- Wireless Broadband
- Digital Multimedia
- MES (Telematics) & Others

2017 Revenue Breakdown by Regions & YoY Comparison

2016 Revenue by Regions



2017 Revenue by Regions



■ Europe ■ North America ■ Asia/Pacific ■ Others

Growth Drivers

Strategy for Two Major Turning Points

5G

Telematics

**Mobile Communication as Centric
Total Solution Provider**

**Wireless
Broadband**



**LTE/5G Router
/Cloud RAN
10G-PON
802.11ax
NB-IoT**

**MES
(Telematics)**



**24GHz/77GHz Radar
Radar Fusion
AVB Ethernet**

LAN/MAN



**Data Center Switch
Carrier Switch
NFV
Industrial Switch**

**Digital
Multimedia**



**IP-Cam
AI-Box**

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IP-Cam
AI-Box

Alpha Networks LTE/5G Solution

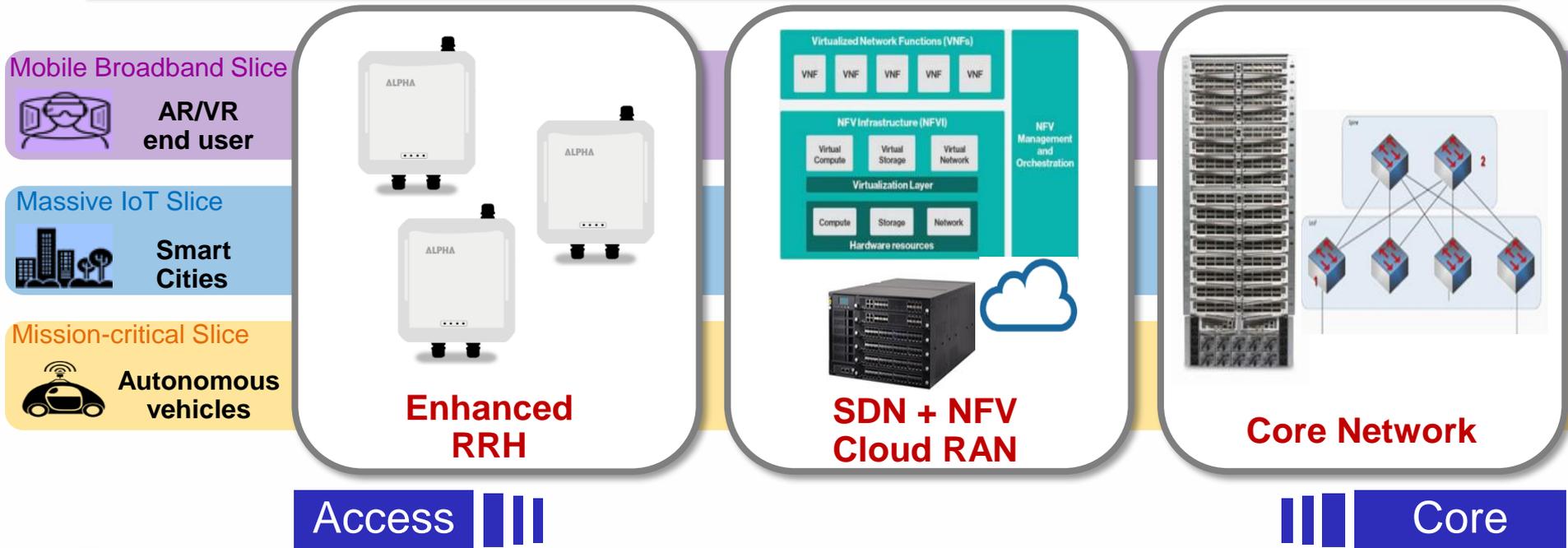
Retrospect

- ◆ 2018 NFV Plugfest @ ETSI
- ◆ C-RAN prototype on carrier-grade server
- ◆ Being a member of 5G national team led by CHT

Prospect

- ◆ Access/Core SDN Switch Field Trial
- ◆ Network MIMO
- ◆ IEEE 1588v2 (<1ns)
- ◆ NFVI Solution Implementation
- ◆ C-RAN + CORD Platform Field Trial

Product Developer → Solution Provider



Alpha Networks Telecom Solution Target Market

- ◆ **Turnkey Solution** for enterprise specific network

- ✓ **Flexible**/extensible network services → NFV
- ✓ **DIY** telecom network → Lite EPC
- ✓ **Instant** network deployment → SDN, SON
- ✓ **Variety** access end device → mMTC, eMBB

C-RAN

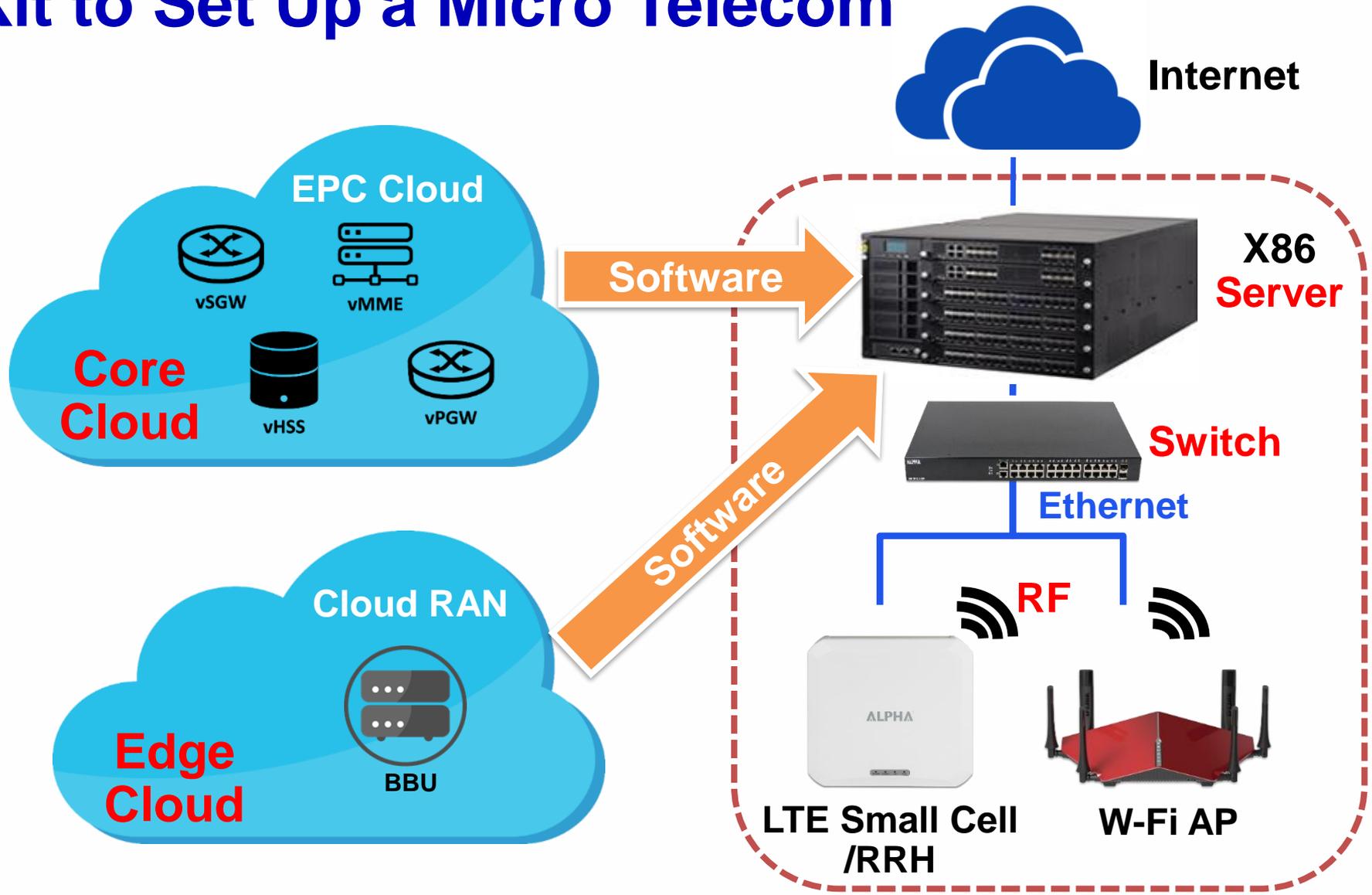
➔ **Offering customized services for developing applications for enterprises**

- ◆ **Application Scenario**

- ✓ Widely used in Stadium, Factory, Mall and Airport

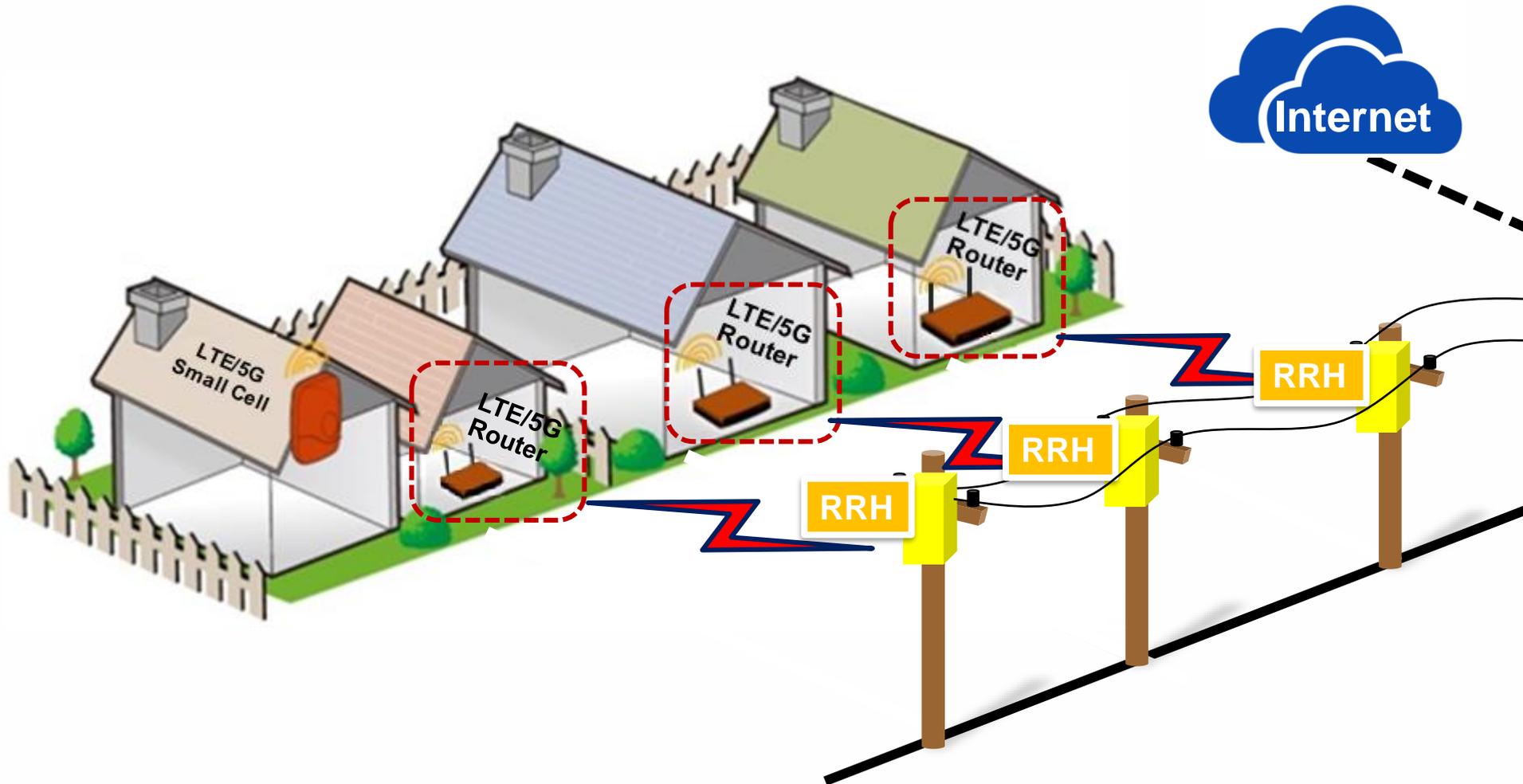


Kit to Set Up a Micro Telecom



**Complete 5G
Telecom Network**

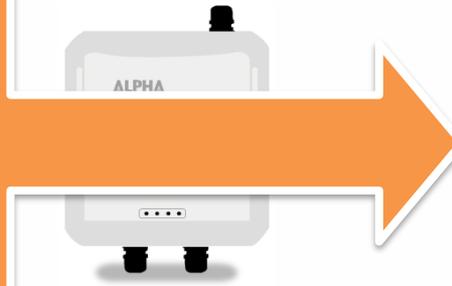
FWA- The Earliest Application of 5G



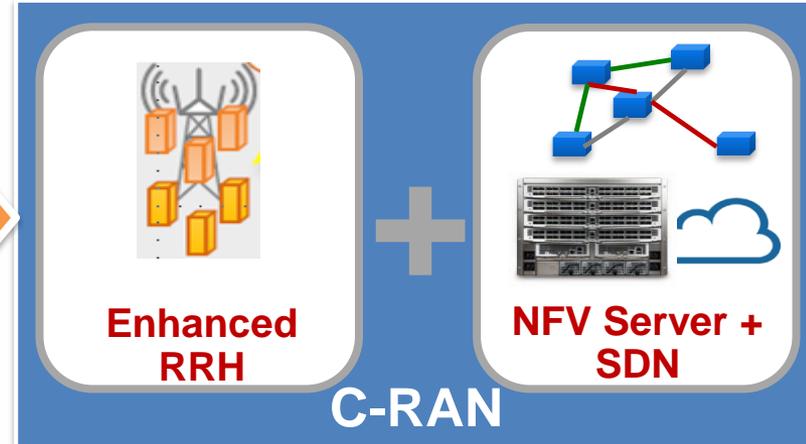
5G FWA- An Alternative to FTTH

Small Cell vs. C-RAN

C-RAN
can fulfill BTS
miniaturized,
Ultra-Dense
deployment and
customized services



Small Cell

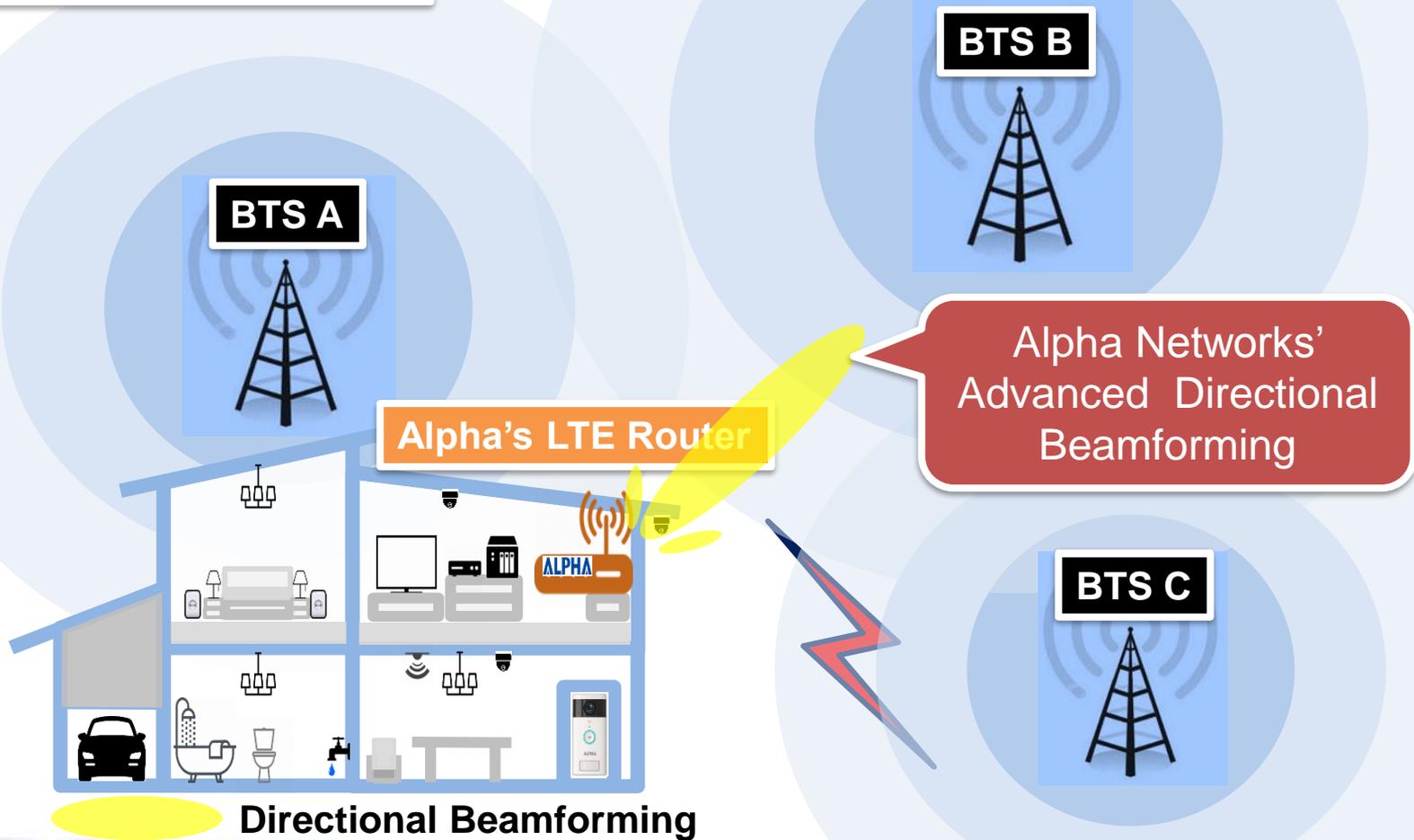


Telecommunication Solution

Mode	Standalone	Centralized
Management	Distributed	Centralized
Latency	Long	Short
Storage	X	O
Number of Users	Small	Large
Scenario	Home/SMB	Enterprise/Campus
Scalability	Limited	Flexible through SDN/NFV
Certification and Encryption	X	O
LWA	X	O
AI	X	O

Alpha Networks' Advanced Directional Beamforming

Which BTS should be picked to get the best QoS?



Directional Beamforming

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(Telematics)



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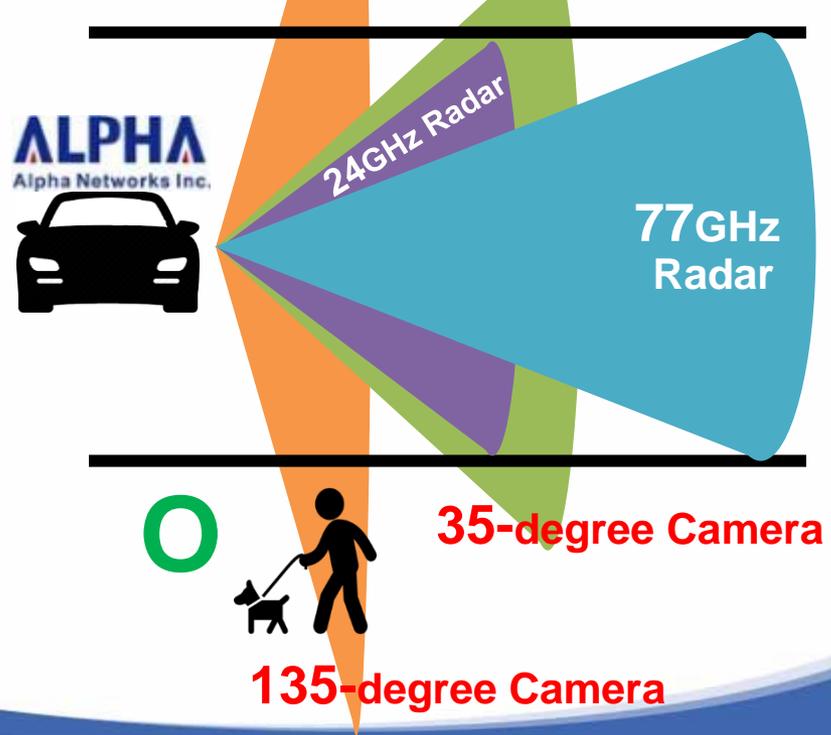
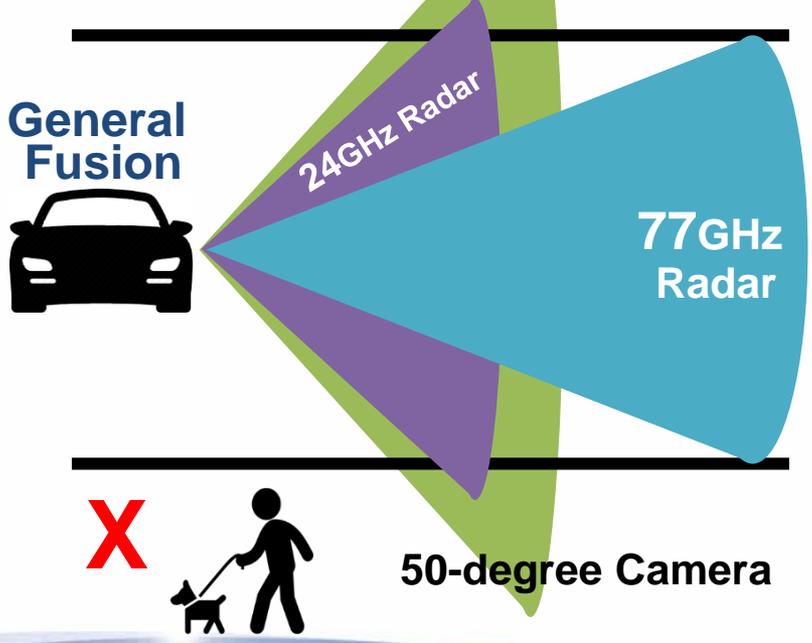
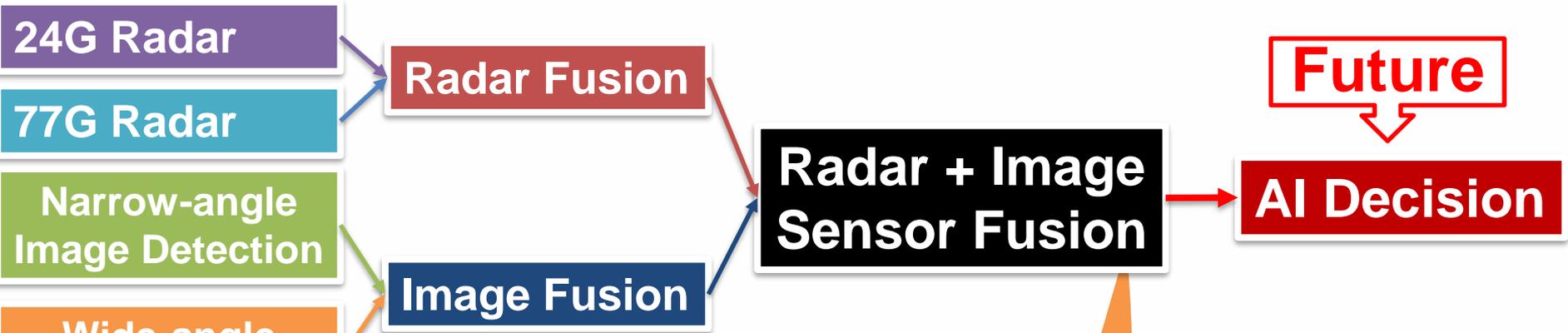
Data Center Switch
Carrier Switch
NFV
Industrial Switch

Digital
Multimedia



IP-Cam
AI-Box

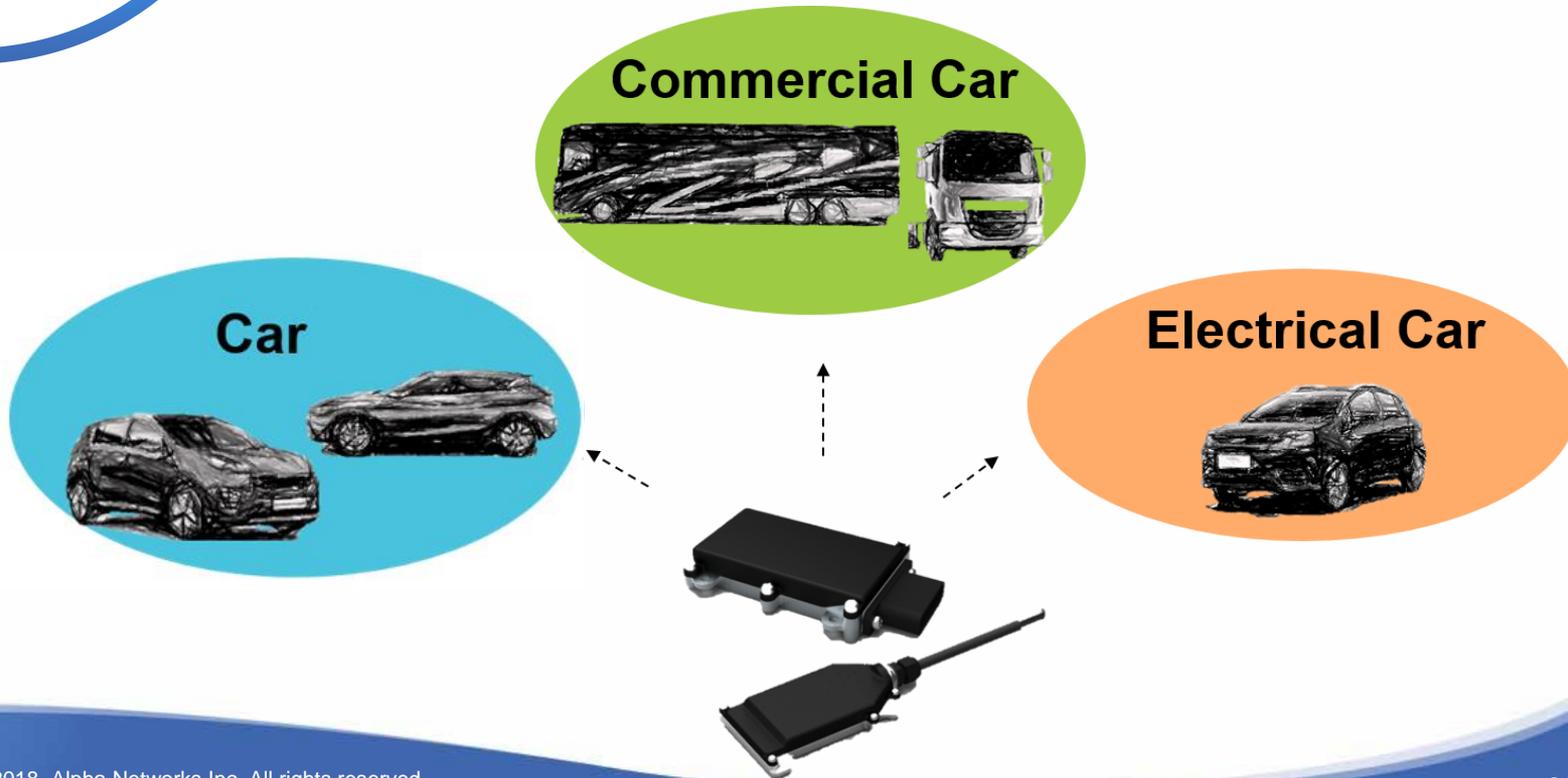
Automotive Sensor Fusion of Integrated Radar & Camera



Intelligent mmWave Radar Sensor Application



- ◆ **24GHz Collision Avoidance Radar (<70 meters)**
 - ✓ Blind Spot Detection (BSD) 、 Parking Assist System (PAS) 、 Industrial Sensing and Monitoring
- ◆ **77GHz Collision Avoidance Radar (<200 meters)**
 - ✓ Autonomous Cruise Control (ACC), Autonomous Emergency Brake (AEB)



Automotive AVB Ethernet Switch and Camera



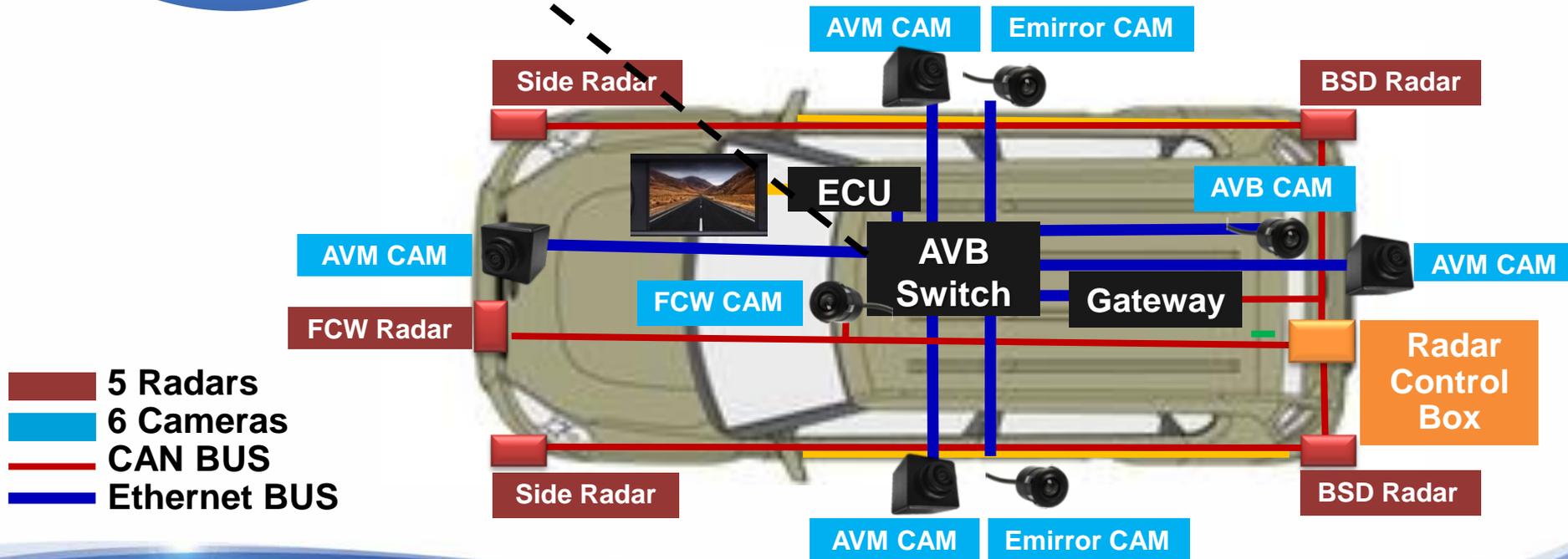
- ◆ **Auto Ethernet Switch**

- ✓ Offering automobile manufacturer a capability of designing and planning AVB Ethernet switch architecture

- ◆ **AVB Camera**

- ◆ **V2X System**

- ✓ Sensor-based communication and Ethernet products



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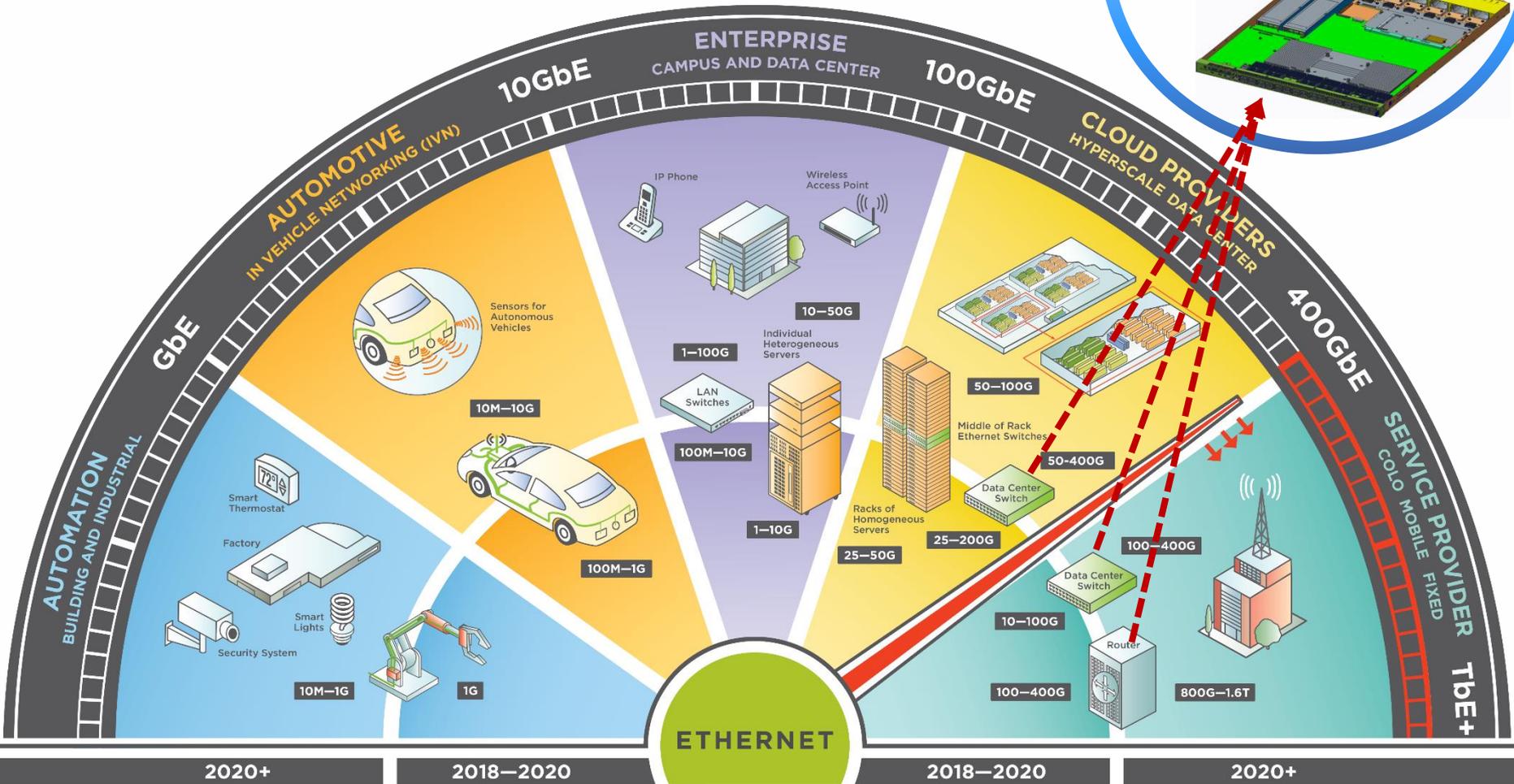
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Industrial Switch

Digital
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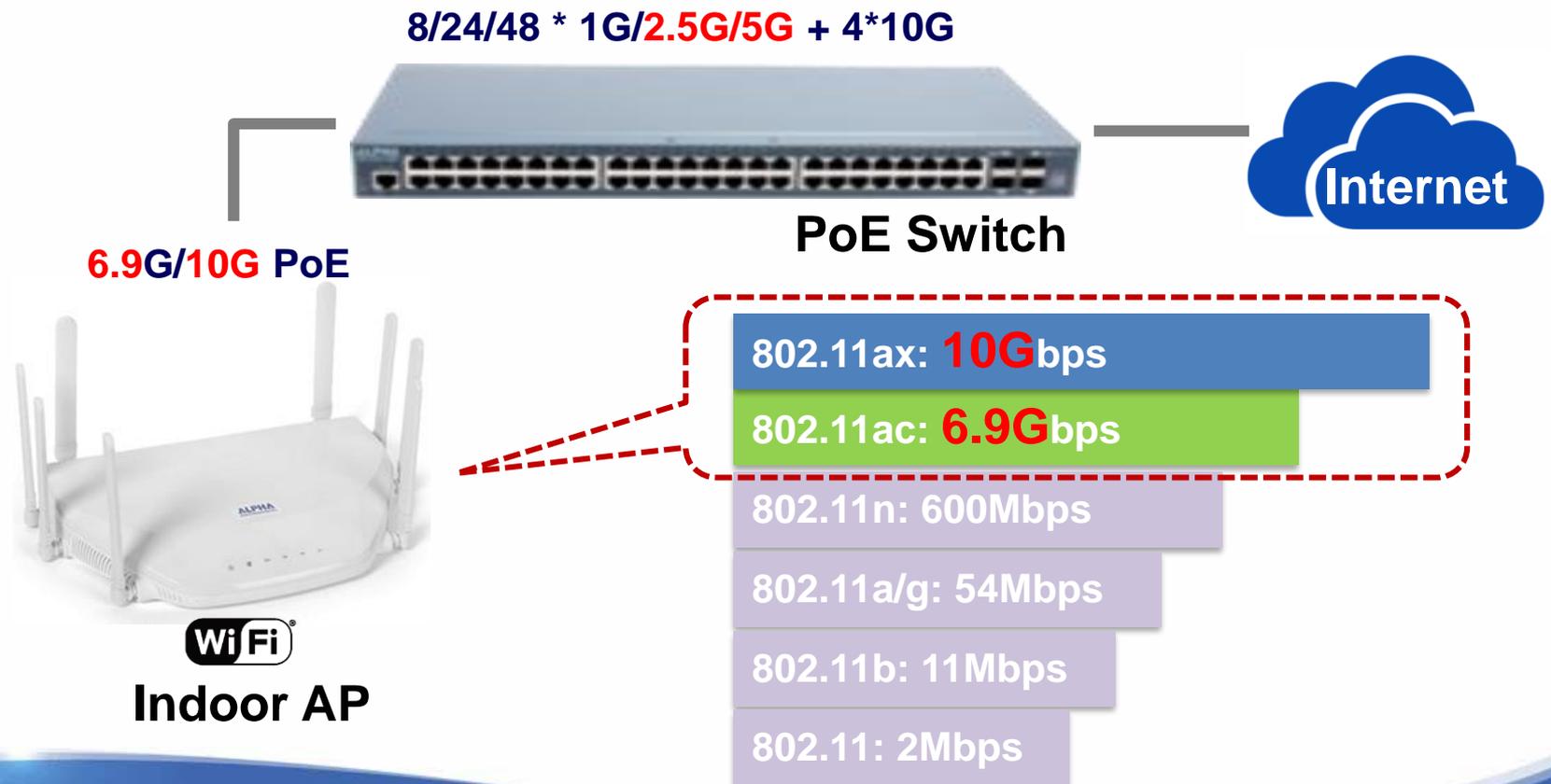
IP-Cam
AI-Box

400G Data Center Switch



2.5Gb/5Gb Ethernet Market-driven

When wireless is faster than wired network



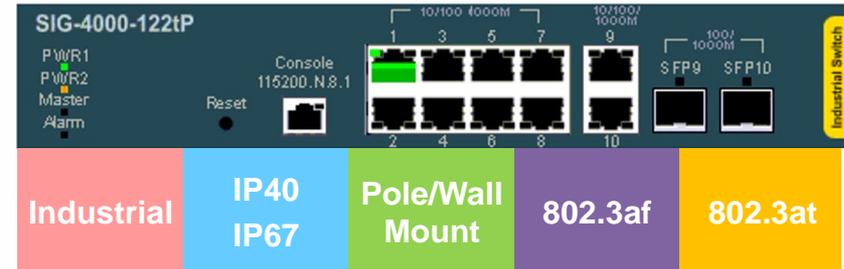
Industrial Ethernet Switch

◆ Features

- ✓ Rugged Environment (-40°C ~ 75°C)
- ✓ PoE
- ✓ Industrial shock, drop, and vibration conditions withstand
- ✓ Flexible interface extension
- ✓ Instant ring recovery (Failover Time ≤ 20ms)

◆ Applications

- ✓ IIoT
- ✓ Auto Ethernet



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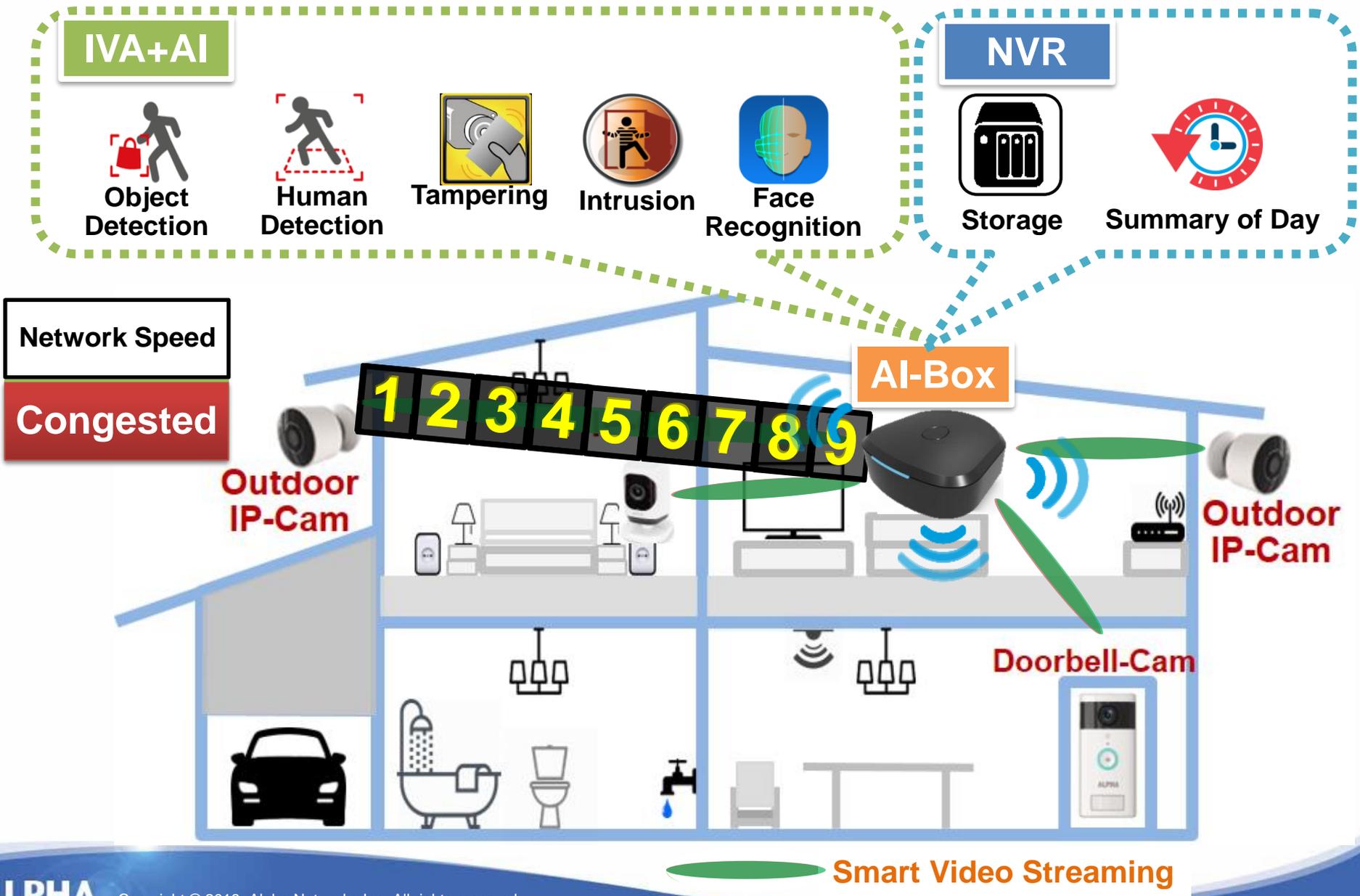
Data Center Switch
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Digital
Multimedia



IP-Cam
AI-Box

Alpha Networks' Unique Smart Video Streaming + AI



Alpha Networks' Product Portfolio and Vision

Wireless & Broadband
LTE Router/Small Cell
5G C-RAN/ NB-IoT

5G Solution

Wireless & Broadband
WL Router/ Enterprise AP
Module/ Extender
11ac Wave2
11ax
SON

Ultra Fast, Reliable Solution

Mobile Enterprise
Solutions
24GHz/77GHz
Radar
Fusion
AVB Switch

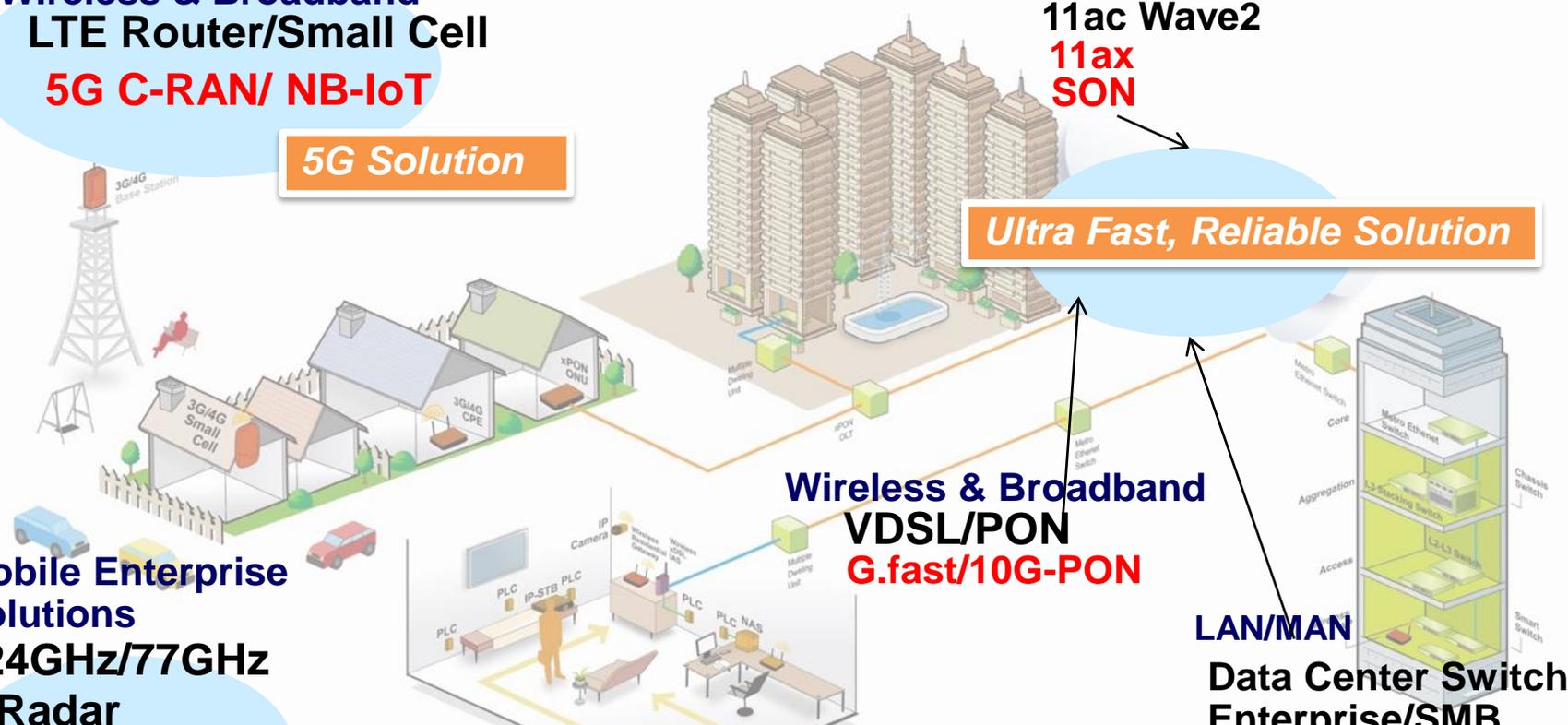
Automotive Solution

Wireless & Broadband
VDSL/PON
G.fast/10G-PON

Digital Multimedia
IP-Cam/NAS/STB/PLC
Smart Home
AI-Box

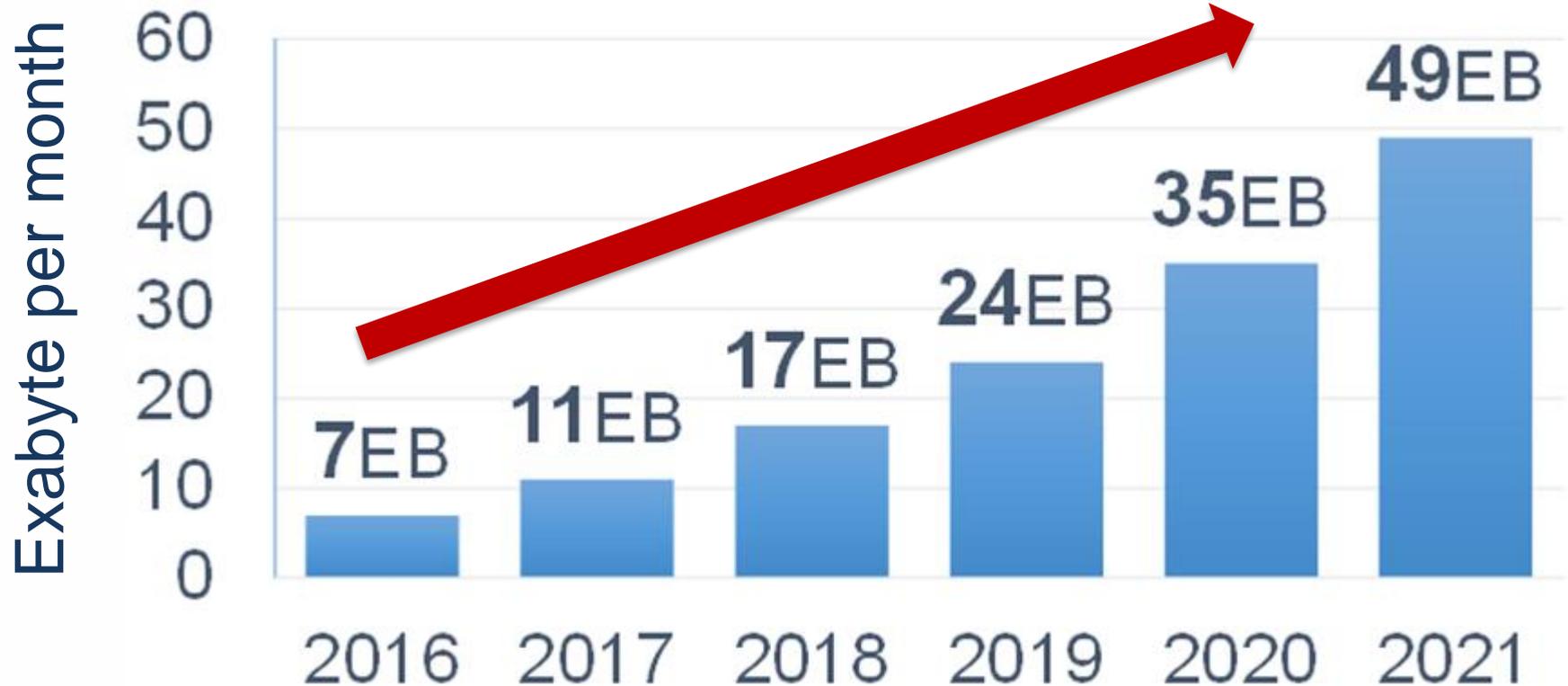
Smart Home Solution

LAN/MAN
Data Center Switch
Enterprise/SMB
Switch
Carrier Switch
1G/10G/40G/
2.5G/ 5G/ 50G
25G/100G/400G



Global Mobile Internet Traffic Forecast

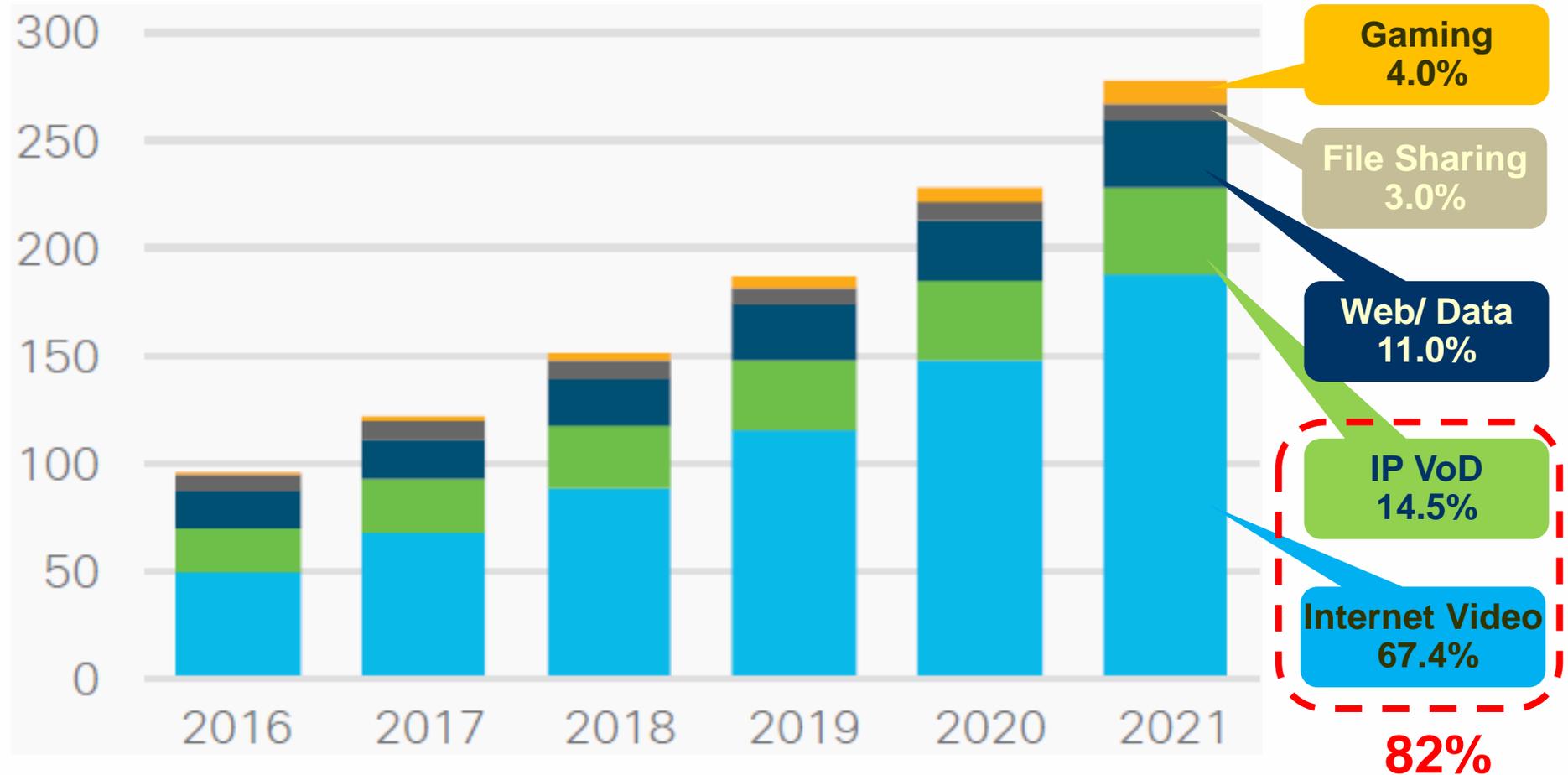
47% CAGR



1 EB = 10^6 TB

Source: Cisco VNI Mobile, 2017

IP video traffic will account for 82% of Internet traffic



Source: Cisco VNI, 2017

Qisda

&

ALPHA



**10GPON
(10Gbps)**

10G/100G Ethernet



Wi-Fi 802.11ax (10Gbps)



LTE-A/ 5G (1G/10G)

Ultra-high-definition + Smooth Streaming

= Perfect User Experience

Intelligence XX + Networking

Q&A

Thank You.

www.alphanetworks.com